

## PATENT ABSTRACTS OF JAPAN

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## (54) MANUFACTURE OF COMPOSITE POWDER

## (57)Abstract:

PURPOSE: To manufacture Cu matrix composite powder without curling by executing mechanical-alloying to the specific composition of Cu or Cu alloy powder, solid lubricant and ceramic mixed powder and further executing the mechanical-alloying to the specific composition of Cu or Cu alloy powder.

CONSTITUTION: The mechanical-alloying is executed to the powder contg. at the ratio of 15-50vol.% Cu powder and 50-85vol.% (solid lubricant + ceramic) powder to obtain the composite powder with much of the solid lubricant and the ceramic more than Cu in the Cu dispersed. Successively, the mechanical-alloying is further executed to this composite powder and Cu or Cu alloy to finally obtain Cu-solid lubricant-ceramic composite powder having the composition of 50-99vol.% Cu, 1-50vol.% (solid lubricant + ceramic). This composite powder is one, which the solid lubricant and the ceramic are uniformly and superfinely dispersed in the Cu matrix.

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